

Part D. Cost Comparisons By State

Methodology in Brief

Total Cost of a DOT Design Team Member

Direct Salary* = the average of design team member salaries

Fringe Amount = Fringe Rate (% of direct salary) X Direct Salary, with the Fringe Rate taken as the sum of the employer contributions to the following benefits:

- Social Security taxes
- Pension Plan
- Health Insurance (health, dental and vision)
- Worker's compensation Insurance
- Unemployment Insurance
- Survivor's Benefits

Overhead Amount = Overhead Rate (% of direct salary) X Direct Salary; General Overhead Costs = Overhead Expenses Not Personnel* + Indirect Labor.

- Indirect Labor = 40% Total Salaries
- Direct Labor = 60% Total Salaries

*Note that the data required to calculate the salary and the overhead expenses not personnel, was taken from the FY2014 expenditures spreadsheets, downloaded from transparency open checkbook websites of DOT of the State, while the data for the fringe rate have been taken from DOT/State employee handbooks, or other sources.

In addition, salaries and wages were distributed 60% to direct labor and 40% to indirect labor for purposes of the overhead rate calculation. As State DOTs do not present direct and indirect labor costs separately as is required for private firms for the purposes of calculating the overhead rate based on the Federal Acquisition Regulations, it was necessary to estimate the direct / indirect labor distribution. A utilization rate of 60% was used to be consistent with the approximate industry average for A/E firms.

Finally, general overhead costs include State DOT expenditures reported, excluding costs which were determined to be allocable to direct projects (highway design, construction, environmental, roadway maintenance, etc.). In assigning costs to direct and indirect cost categories, we used the best information available to us, which included detailed research of supporting information made publicly available by State DOT's.

Total Cost of a Firm Design Team Member

- Direct Salary**
- Fringe Amount = Fringe Rate** X Direct Salary
- Overhead Amount = Overhead Rate** X Direct Salary.
- Profit Amount = Profit Rate** X [Direct Salary + Fringe Amount + Overhead Amount]

**This data was obtained with the use of Google survey.

California

California DOT Data

DIRECT SALARY	\$	89,319
FRINGE AMOUNT		
Direct Salary	\$	89,319
X Fringe Rate		79.9%
= Fringe Amount	\$	71,346
OVERHEAD AMOUNT		
Direct Salary	\$	89,319
X Overhead Rate		211.7%
= Overhead Amount	\$	189,070
TOTAL COST	\$	349,734

California Private Firm Data

DIRECT SALARY	\$	92,757
FRINGE AMOUNT		
Direct Salary	\$	92,757
X Fringe Rate		33.7%
= Fringe Amount	\$	31,229
OVERHEAD AMOUNT		
Direct Salary	\$	92,757
X Overhead Rate		125.4%
= Overhead Amount	\$	116,284
PROFIT AMOUNT		
Direct Salary + Fringe Amount + Overhead Amount	\$	240,270
X Profit Rate		9.4%
= Profit Amount	\$	22,596
TOTAL COST	\$	262,866

California SUMMARY COMPARISON TABLE

	Annual Salary	Fringe Rate	Fringe Amount	OH Rate	OH Amount	Profit Rate	Profit Amount	Total Annual Salary	DOT-CONSULTANTS
DOT	\$ 89,319	79.9%	\$ 71,346	211.7%	\$ 189,070	0.0%	\$ -	\$ 349,734	\$ 86,868
CONSULTANTS	\$ 92,757	33.7%	\$ 31,229	125.4%	\$ 116,284	9.4%	\$ 22,596	\$ 262,866	

Discussion.

21 private California ACEC member firms submitted data for this survey. The DOT data is extremely conservative in that all data were taken from DOT published sources and was not available in detail on transparency websites as were other states. However, there is clear evidence that the annual cost of a design by professionals in Caltrans exceeds the cost of performance of the

design by contract.

Sources.

SALARY

<http://publicpay.ca.gov/Reports/RawExport.aspx>

FRINGE BENEFIT

<http://www.calhr.ca.gov/employees/pages/salary-and-benefits.aspx>

<https://www.calpers.ca.gov/page/employers/actuarial-services/employer-contribution-rates/public-agency-contribution-rates>

<https://www.calpers.ca.gov/page/employers/benefit-programs/health-benefits>

http://www.wcirb.com/class-search?search_api_views_fulltext=3632&search_api_aggregation_3=

http://www.edd.ca.gov/payroll_taxes/unemployment_insurance_tax.htm

OVERHEAD NOT PERSONNEL

FHWA approved Overhead Rates for California.